think, he will probably create a conviction in the minds of most of his readers that he is both !

Only a few of the commonest birds have been described—four species of Titmice, the Spotted or Pied Flycatcher, the Robin, the Chaffinch, and the Willow-Wren ; but the habits of these birds, and their varying moods, appear to have been closely observed, and are set forth in a pleasant and chatty manner.

Of the numerous photographs here reproduced the majority are excellent. Here and there, however, one receives a shock, some extremely indifferent pictures having been allowed to see the light. Two or three of the photogravures are really beautiful.

The book is tastefully bound, well printed, and would make an admirable gift for young people.

The Gross Anatomy of Limnæa emarginata, *Say, var.* Mighelsi, *Binney*. By Frank Collins Baker. *Bull. Chicago Acad. Sci.* ii. pp. 189–211, with 6 plates. 1st June, 1900.

This is a very detailed account of this freshwater mollusk, based on a large number of specimens from various localities in Maine. Detailed measurements of thirty-six shells are given, and two plates show the range of variation in shells, both of its normal form and of the variety *Mighelsi*. The anatomical details are fully described and figured, and compared with those of five other species of *Limnæa*. There does not appear to be any great difference, the chief novelty being the existence of two lateral blood-vessels of the œsophagus and intestine, instead of the one that is usually shown in the figures of other species. The plates are well drawn in black and white, and offer a stock of information most useful for further comparisons.

Memoirs of the Geological Survey of India. Palæontologia Indica, being Figures and Descriptions of the Organic Remains procured during the progress of the Geological Survey of India. New Series. Vol. II. Part 1. *Observations sur quelques Plantes Fossiles des Lower Gondwanas.* Planches I.–VII. Par R. Zeiller, Ingénieur en chef des Mines, &c., &c. Pages (i–ii not numbered) 1–40. Folio. Geol. Survey Office, Calcutta. Kegan Paul & Co., London.

The fossil plants submitted by C. L. Griesbach and R. D. Oldham to Professor R. Zeiller for his critical examination, and here described and illustrated, have been collected at various places in the Peninsular Coalfields of India since the publication of Dr. O. Feistmantel's grand work on the Fossil Flora of the Gondwana System (Palæont. Indica, ser. xii. vol. iv. part 2, 1886). The Pal. Ind. Memoirs especially containing his account of the fossil plants from Talchir, Damuda, South Rewah, and elsewhere in Western

Bengal, are published in the Series XII. vol. iii. parts 1, 2, 3 (1879–1881), with 80 plates, and vol. iv. parts 1 and 2 (1882–1886), with 35 plates.

The plant-remains sent to Prof. Zeiller for examination numbered about 350 specimens, and, although for the most part referable to species already known, they supplied various useful indications of form and structure, especially for seven new species (including one new genus), thus adding nearly 10 per cent. to the 77 species instituted by Feistmantel for the Lower Gondwana. The new forms are:—

Glossopteris tortuosa, p. 14.
Schizoneura Wardi, p. 27.
Phyllotheca Griesbachi, p. 30.
Cycadites (?), sp., p. 33.
Feistmantellia bengalensis, gen. et sp. n., p. 36.
Araucarites Oldhami, p. 36.
Cardiocarpus indicus, p. 37.

Professor Zeiller, moreover, offers some new and important observations on *Vertebraria* as the rhizome of *Glossopteris* (pp. 17–24) and on the specific identity of *Gl. indica* and *Gl. communis* (pp. 8–12).

At pages 2 and 3 there is a list of localities, not mentioned by Feistmantel, from which Lower Gondwana fossils have been recently procured. Among these is the locality of Reohel in the basin of South Rewah, re-examined by Mr. R. D. Oldham, and where, in the Damuda series, he procured, besides other specimens, a very fine example of *Glossopteris indica*, consisting of a bunch of fronds still attached to a fragment of *Vertebraria*; and of this he gave a figure in the Records Geol. Surv. India, 1897.

In 1861 Sir Charles Bunbury suggested that *Vertebraria* may have been the root of *Phyllotheca*. Dr. Feistmantel and others (to 1887) made little progress in its elucidation beyond referring to it doubtfully as an Equisetaceous rhizome (see Mem. Geol. Survey New South Wales, 1890, p. 87). In 1896, however, Prof. Zeiller was able to figure and describe the relation of some fronds of *Glossopteris Browniana* to the transverse joints of a *Vertebraria* in a specimen from South Africa (Compt. Rend. Acad. Sci. vol. cxxii. pp. 744, 745; and Bull. Soc. Géol. France, vol. xxiv. pp. 351–362, pl. xv. figs. 1–9). He states also, at p. 17, that in the Exposition Universelle at Paris in 1900 there was an analogous specimen from the Transvaal, namely a bunch of large fronds of *Glossopteris indica* at the end of a long piece of *Vertebraria*. Thus, he adds, there can be no doubt of the natural attachment of the fronds to the rhizome, but the constitution of the latter and the interpretation of its imprints are not quite clear.

At pages 4–6 is a list of localities that have been mentioned by Feistmantel, and in which other species of fossil plants have been

found besides those observed by him. At pages 6–39 follow descriptions of 13 (?) species:—I. Ferns: *Sphenopteris*, 1; *Glossopteris*, 4, including *Vertebraria*. II. Uncertain: *Dictyopteridium*, 1. III. Equisetinæ: *Schizoneura*, 2; *Phyllotheca*, 1. IV. Corditæ: *Noeggerrathiopsis*, 1. V. Cycadinæ: *Cycadites*, 1; *Salisburiææ*, ?; *Feistmantella*, 1. VI. Coniferæ: *Araucarites*, 1. VII. Seeds of Gymnosperms: *Cardiocarpus*, 2; *Voltzia*, ?.

An alphabetical list of 43 species described or cited in the present memoir, with their localities, is given at page 40.

MISCELLANEOUS.

Cyclops rubellus, *Lilljeborg*.

To the Editors of the 'Annals and Magazine of Natural History.'

Gentlemen,—On 2nd May, 1901, my father and I found in Loughrigg Tarn, near Windermere, several specimens of a small *Cyclops* which, though closely resembling both *C. bicolor* and *C. varicans*, differed from both in certain well-marked particulars. We found ourselves unable to refer our specimens to any known British species; but when Professor Lilljeborg's work on the Swedish Cladocera was published and came into our possession, we were able at once to identify them with *C. rubellus*, which is intermediate between the two above-named species. We wrote to Professor Lilljeborg on the subject, and he kindly sent us specimens to compare with our own, thereby enabling us to put the identity of our British specimens beyond question. We have therefore to add the name of *Cyclops rubellus*, Lilljeborg, to the list of the British Entomostraca.

The following is abridged from our translation of Professor Lilljeborg's description, which he has kindly revised:—

"The female varies from ·6 to ·9 millim. in length. It appears somewhat thick-set, having an ovate, moderately broad cephalothorax, though the abdomen is comparatively slender. The first thoracic segment is longer than the abdomen without the apical bristles. The fifth thoracic segment bears on each side a rather large bristle, directed backwards. The abdomen is slightly more than half the length of the cephalothorax, and its first segment is equal to the three following taken together. The stylets are short and broad, set closely together, and very slightly divergent. Their length is about equal to the distance between the hinder margin of the last abdominal segment and the middle of the last segment but one. The bristle on the outer margin of each stylet is small and is situated about three quarters of the way down. The outermost apical bristle is moderately stout, and shorter than the innermost